



CAPE COD COMMISSION

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July 13, 2006

Comments on the Notice of Intent to Prepare an EIS on the Cape Wind Project
Minerals Management Service
381 Elden Street
Mail Stop 4042
Herndon, VA 20164

Re: Cape Cod Commission comments on the Cape Wind Energy Project

Dear Sir or Madam:

In response to the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the Cape Wind Offshore Wind Development that appeared in the May 30, 2006 *Federal Register*, the Cape Cod Commission Subcommittee (Subcommittee) respectfully submits the following comments.

The Commission subcommittee has previously filed comments on this project with the Army Corps of Engineers, specifically commenting on the Joint Draft EIS/EIR prepared in November 2004 in a letter dated February 22, 2005. It is the subcommittee's understanding that the Minerals Management Service (MMS) is in possession of these comments and therefore rather than restate those comments in their entirety, the subcommittee wishes to submit them for your consideration by reference. However, the subcommittee would like to take this opportunity to reiterate some of the more global comments on the EIS that the subcommittee believes will have a defining impact on the adequacy of the final document.

The subcommittee's comments reflect a desire to see that a comprehensive analysis of the proposed project be completed by MMS that incorporates the following comments in order that a fair and reasoned decision based on the relative merits of the project can be made. This is essential for a project that is the first of its kind in the nation, where a clear picture of the associated impacts has to be established so that the issues can be sharply defined for all those with a stake, interest or regulatory role in the proposal. All participants in the environmental review need to be confident that the information gathered is clear, concise and verifiable so that the final decision on the project is supported by facts.

The subcommittee requested that the Army Corps of Engineers (ACOE) prepare a Supplemental DEIS for the Cape Wind project. The preparation of a DEIS by the MMS in essence provides an opportunity to respond to many of the comments raised by the subcommittee, cooperating agencies and the public during the comment period in lieu of a Supplemental DEIS.

As referenced in our February 22, 2005 letter, the subcommittee believes the following issues need to be addressed in the MMS DEIS:

1. The MMS DEIS should clearly articulate the “purpose and need” of the project and in particular ensure that it does not overly constrain the alternatives analysis to be presented. The DEIS/DEIR prepared by the ACOE (ACOE DEIS/DEIR) narrowly defined “utility-scale renewable energy” projects to a range between 200-1,500 MW. This range, developed by reviewing the nameplate capacity of fossil-fueled power facilities currently supplying the grid, is an order of magnitude greater than the range of renewable energy technologies in the region and effectively places the proposal outside of the class of renewable energy facilities. Employing this range effectively eliminates consideration of other forms of renewable energy from consideration as alternatives and, when used as a screening criteria, improperly narrows the range of alternatives that can be considered. Therefore, if a range is to be selected, it should be appropriate and in scale with renewable energy projects currently functioning as utilities and providing power to the grid.
2. It is unclear from the *Federal Register* whether the MMS intends to use screening criteria to narrow the list of alternatives analyzed in a manner similar to that employed by the ACOE in their DEIS/DEIR. If the MMS DEIS is to use this approach, the subcommittee recommends that any criteria be flexibly applied and take into account potential technological changes that may impact the feasibility of a particular region to accommodate renewable energy installations. For example, the ACOE DEIS/DEIR included a screening criteria that disqualified large areas of northern New England from consideration based upon a lack of excess capacity in the transmission system. While this may be a current constraint, it seems possible that upgrades to the transmission system could be completed that would remove this barrier and allow consideration of alternatives in locations other than southeastern Massachusetts.
3. The Federal Register NOI notes that the alternatives being considered will include a phased installation and alternative locations, South of Tuckernuck, Nantucket Shoals, Monomoy Shoals and a Deepwater Alternative east of Nauset Beach. The subcommittee is encouraged by the addition of the phased installation and deepwater alternatives to the analysis, as these are both essential to an understanding of the various costs associated with developing in the Outer Continental Shelf (OCS) and assist in an understanding of why Nantucket Sound was selected as a site for an offshore wind facility. The subcommittee also strongly recommends that additional variations be explored that would be

conducive to providing simple comparisons between project alternatives and allow a weighing of whether the proposed project is in the public interest and is the most appropriate way of reaching the state's important renewable energy goals. Alternatives that should be considered include:

- a. Smaller facilities consisting of fewer turbines or smaller turbines at the same location. This could perhaps be explored as part of the phased alternative.
- b. Alternative configurations should be considered, including:
 - i. Relocating some rows to be further from shore. The ACOE DEIS/DEIR included reference to a British study (A guide to Best Practice in Seascape Assessment) that developed a methodology for assessing the visual impacts of changes to the seascape (including new wind turbine development). That study suggests that 15 kilometers (or approx 9.3 miles) would be the seaward extent beyond which structures in the ocean are of limited regional visual significance to views from shore. Using this information, the MMS should explore an alternative that places the turbines at least this distance from the shore to address the visual concerns raised by many individuals and organizations during the ACOE's comment period.
 - ii. A more compact facility with tighter spacing between turbines. The Arklow Offshore facility in Ireland uses the same turbines as those proposed by Cape Wind, yet the Cape Wind proposal has turbines spaced twice as far apart. There has been no satisfactory answer as to why the turbines could not be located closer together, reducing the overall footprint of the project. Therefore, the relative merits of this change should be explored as an alternative design.
 - iii. Use of a mix of turbine sizes. This could include using smaller turbines on the periphery of the array that may mitigate visual or avian impacts yet still be consistent with providing a utility scale project. In addition, it is possible that different sized turbines will have a different power curve (with different operating efficiencies and different thresholds for start up/shut down wind speeds). This variation in physical turbine characteristics may allow a more consistent power production that should be evaluated in the context of regional/local seasonal demand fluctuations. A discussion of these alternative engineering arrangements would be instructive and support a final determination regarding the optimum design of the project from power supply and public interest perspective rather than the perspective of maximizing profit and return.
- c. A distributed generation option that would consider several smaller wind farms, which seems feasible based on the recent proposal for three sites located in Buzzard's Bay, Massachusetts.

4. The subcommittee also notes that the land-based alternative included in the ACOE DEIS/DEIR has been removed from the list of potential alternatives. While the subcommittee understands that any land-based alternative, as well as any ocean alternative within state 3-mile jurisdiction, is outside the OCS jurisdiction of the MMS, if these alternatives are not analyzed the reviewing public has no means to weigh whether the use of the OCS is in the public interest or the least environmentally damaging. Therefore, the subcommittee urges the MMS to include both a land-based alternative and a near-shore alternative in the DEIS being prepared.
5. The subcommittee expressed a number of concerns about the analysis and methodology employed in the ACOE DEIS/DEIR that are briefly summarized below (more details are provided in the subcommittee letter dated (February 22, 2005):
 - a. Incomplete - Flawed assumptions
Some of the ACOE DEIS/DEIR's conclusions appeared to be based either on an incomplete or flawed analysis. The ACOE DEIS/DEIR did not reference all sources of information on a topic and the analysis presented appeared, on occasion, to be derived from a methodology that includes flawed assumptions and inappropriate comparisons.
 - b. Lack of independent assessment – lack of transparency
It was unclear from the text of the ACOE DEIS/DEIR whether independent analysis was undertaken to reach some of the conclusions presented. This was a particular concern when information that was provided by the Applicant and was relied upon as the primary source of information.
 - c. Balance of conclusions
In many sections of the ACOE DEIS/DEIR, conclusions regarding the expected benefits and detriments are not directly related to the proposed project. General statements were included that suggested benefits but the ACOE DEIS/DEIR failed to adequately link these to the specific project. Conversely, where potential detrimental impacts are identified, they appeared to be downplayed.
 - d. Lack of quantitative information
Some sections (particularly parts of the alternatives analysis) did not present enough quantitative information on the relative impacts of the facility under consideration. This prevented any meaningful comparison between the various alternatives.

Therefore, the subcommittee recommends that in order to be consistent with the purpose of NEPA, the MMS must ensure that these issues are addressed in the DEIS. The subcommittee believes that a key objective of the DEIS should be to objectivity and transparently lay out the facts in a manner that is easily accessible

and can be relied upon with confidence by all decision makers as the project moves through the regulatory process.

6. The MMS DEIS should ensure that plans and data essential to a full understanding of the entire project be incorporated into the DEIS for comment, namely the Spill Prevention Control and Countermeasure Plan (SPCC), System Impact Study (SIS), Storm Water Pollution Prevention Plan (SWPPP) and an Operations and Maintenance Plan (O&M). Furthermore, no report has been presented on the data collected from the meteorological tower currently located in Nantucket Sound. This information would allow an accurate characterization of the climate conditions in the area in regard to wind speed, weather conditions and currents.
7. The MMS DEIS should provide a full and complete treatment of the cumulative impacts associated with the project. Throughout the ACOE DEIS/DEIR, the cumulative impact assessment is limited to similar types of energy and cable projects that have been permitted or are likely to occur in the vicinity of Cape Cod. While consideration of these activities is an appropriate exercise in cumulative impact analysis, the MMS DEIS must also address the additive impacts that will accrue over the project's anticipated lifespan. For example, the cumulative impacts resulting from the loss of avian species because of turbine strikes over the course of the project's operation should be evaluated.
8. The MMS DEIS should also outline appropriate mitigation to reduce or avoid all identified potential impacts. The mitigation proposed throughout the ACOE DEIS/DEIR often relates to the project design, such as the use of newer turbine technology with slower spinning rotors as mitigation for avian mortality and painting of structures to mitigate visual impacts. However, while these project design steps may reduce impacts associated with the project, no clear picture emerges whether they minimize impacts or if impacts may be avoidable. This incomplete picture of the possible mitigation could be remedied in part by a more thorough alternatives analysis that varies the project parameters as suggested earlier in this letter.
9. The MMS DEIS should ensure that a decommissioning plan for removal of the turbines and related infrastructure be provided and that a funding mechanism for the decommissioning plan be discussed. The subcommittee understands that the MMS will be requiring that a decommissioning plan be provided and hope that it will include a discussion of what provisions are to be made for potential future changes in inflation and engineering costs associated with decommissioning, technological impediments to complete removal of the structures, and describe any risk that a shifting shoal will expose the remaining piles. In addition, the MMS DEIS should discuss other feasible decommissioning strategies and their impacts.

10. The subcommittee understands that the MMS will be requiring on-going monitoring of the project as part of their cradle-to-grave approach to management of the OCS. The subcommittee hopes that the DEIS clearly stipulates the extent of the monitoring that would be carried out throughout the lifetime of the project, including precautionary monitoring intended to identify incremental changes in the environment that could be precursors to or indicators of adverse impacts. Examples could include species composition in the vicinity of the piles, ongoing assessments of avian behaviors as they relate to the facility, bathymetric surveys of the shoal, etc.
11. The MMS DEIS should also provide detailed information regarding the potential environmental impacts associated with a catastrophic failure of the facility, such as in the event of a hurricane or seismic event. This should include details on the design specifications for all infrastructure and the engineering failure point of structures. The analysis should reference the frequency of hurricanes and seismic activity and establish the likelihood of failure. The contingencies for responding in the event of failure should also be discussed, including plans for reconstruction, recovery/salvage, spill clean-up and what financial arrangements have been made to cover these costs. Special attention should also be paid to assessing the impacts of any spill, including the potential environmental impacts and the direction and area likely to be affected.

As noted at the beginning, the subcommittee's letter dated February 22, 2005 provides a wide range of additional comments on specific topics that should be addressed in the MMS DEIS. It is our hope that the MMS will consider the comments here and those of the subcommittee's February 22, 2005 letter as the DEIS is drafted. Any questions on the points raised should be directed to Phil Dascombe, Planner at the Cape Cod Commission ((508) 362-3828). Thank you for the opportunity to comment,

Sincerely,

Elizabeth G. Taylor
Subcommittee Chair

cc:

Cape Cod Legislative Delegation
Assembly of Delegates
Barnstable County Commissioners
Barnstable Town Council, President
Cape Town's Boards of Selectmen
Martha's Vineyard Commission
Nantucket Planning & Economic Development Commission
Cape Cod Commission members
Mr. Jim Gordon, Cape Wind Associates
Ms. Anne Canaday, MEPA Unit, Exec. Office of Environmental Affairs